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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,316	03/29/2001	Ranjit Bhambra	037/49509	1863

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EXAMINER

BELLINGER, JASON R

ART UNIT PAPER NUMBER

3617

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,316

Applicant(s)

BHAMBRA, RANJIT

Examiner

Jason R Bellinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Response to Arguments

1. In view of the appeal brief filed on 30 January 2004, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Applicant's notice of appeal and appeal brief are noted, however upon additional search new prior art has come to the attention of the examiner, therefore, the finality of that action is withdrawn.

Claim Objections

3. Claims 5 and 9-14 are objected to because of the following informalities: In line 4 of each claim, it is suggested that the term "comprising" be replaced with the term --comprise-- for grammatical clarity. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 3-4, 6-8, 15, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 6 are indefinite due to the fact that it is unclear what is being claimed by the presence of the term "respectively" in line 4 of claim 3 and line 3 of claim 6. It is unclear whether the term means that "indentations" and the "continuous, approximately cylindrical hollow body" are provided on the interior and exterior sides of the hub, or that fastener receiving "openings" and "indentations" are provided on the interior and exterior sides of the hub, or a combination of all three elements is provided on the interior and exterior sides of the hub. Furthermore, the claims are indefinite due to the fact that a "continuous, approximately cylindrical hollow body" would extend from the interior side of the hub to the exterior side of the hub (i.e. the hollow body would extend through the wheel hub), it is unclear whether there is only a single hollow body extending through the hub or a hollow body is provided on both the interior and exterior sides of the hub (thus forming more than one continuous hollow body).

Claims 4, and 7-8 are indefinite due to the fact that it is unclear what is actually being claimed by the term "thickenings" in line 2 of each claim. It is unclear whether the term is describing protrusions that extend from the respective free front surfaces of the spokes, or whether the width of the spokes increase in the free front surfaces of the

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spoke, etc. The claims are further indefinite due to the fact that it is unclear what elements of the invention are being referred to by the term "thereof". It is unclear whether the second areas, the spokes, the V-shaped cross-sections, the thickenings, the free front surfaces, or the legs are being referred to by the term "thereof".

Claim 15 is indefinite due to the fact that it is unclear what is actually being claimed by the phrase "progressive transitions from the first areas to the second areas take place." It is unclear what property of the spokes the "progressive transitions" are meant to describe. For example, it is unclear whether the "progressive transitions" refer to the thickness of the spokes transitioning from the first area to the second area, or the shape of the spokes transitioning from the first area to the second area, or the width of the spokes transitioning from the first area to the second area, or a combination of the above, etc.

6. Claims 4 and 7-8 recite the limitation "legs" in line 3 of each claim. There is insufficient antecedent basis for this limitation in the claims. No structure has been set forth for the spokes having "legs" has been previously set forth in the aforementioned claims, or the claims from which they depend.

7. Claim 17 recites the limitation "transitions" in line 1. There is insufficient antecedent basis for this limitation in the claim. No structure has been set forth for the spokes having "transitions" has been previously set forth in the aforementioned claim, or the claims from which it depends.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 4, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirt. With respect to claim 1, Hirt discloses a wheel for motor vehicles comprising a wheel hub **a**, a rim **a1**, and spokes **a4** by which the wheel hub **a** and the rim **a1** are connected with one another. In first areas near reference character "a" in Figure 3 connected with the wheel hub **a**, the spokes **a4** have solid cross-sections and; in second areas connected with the rim **a1**, the spokes have V-shaped cross-sections as shown in Figures 3-5. Because the spokes **a4** are solid (i.e. not of hollow construction), the first areas where the spokes are connected to the hub have solid cross-sections.

With respect to claim 4, Hirt discloses a wheel for motor vehicles wherein in the second areas having the V-shaped cross-sections, the spokes **a4** have thickenings (12 & 13) on respective free front surfaces of legs thereof as shown in Figures 4-5.

With respect to claim 15, Hirt discloses a wheel for motor vehicles wherein transitions from the first areas to the second areas take place in a progressive manner.

10. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Reid. Reid shows a wheel having a hub, rim, and spokes through with the hub and rim are

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connected. First areas of the spokes are connected with the hub and have a solid cross-section (as shown in Figure 2). Second areas of the spokes are connected with the rim and have a V-shaped cross-section (as shown in Figure 3).

As shown in Figures 1 and 4, the spokes are arranged to correspond with openings provided in the wheel hub, which receive fastening bolts. Indentations are provided between the openings (namely the areas between the spokes that lack openings). A continuous, and approximately cylindrical hollow body (namely the central hub bore) is provided on interior and exterior sides of the hub.

As shown in Figures 3, the second areas of the spokes include thickened portions on respective free front surfaces of the legs. The second areas of the spokes also include legs; the widths thereof continuously increase as the spoke extends towards the rim (as best seen in Figure 1). Flat elements are formed in transition areas between the spokes and rim.

The first areas of the spokes progressively transition to the second areas of the spokes. Namely, along the longitudinal direction from the wheel hub to the rim of the spokes the cross-sections change from a solid (at the hub) to triangular to V-shaped (at the rim).

Response to Arguments

11. Applicant's arguments filed 30 January 2004 have been fully considered but they are not persuasive. With respect to the Hirt reference lacking spokes which transition from a first area having a solid cross-section to a second area having a V-shaped cross-

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section, the entire length of the spokes **a4** of Hirt are considered to have a solid cross-section due to the fact that they lack enclosed cavities (which would make them hollow spokes). The spokes of Hirt also have a V-shaped cross-section. Therefore, since the independent claim simply sets forth that the first areas of the spokes have a "solid cross-section" and the second area of the spokes has a "V-shaped cross-section", the Hirt reference is considered to meet the limitations of the claims.

With regards to the applicant's arguments that the spokes of the Hirt reference do not have "thickenings on respective free front surfaces of legs thereof", the elements 12 & 13 of Hirt increase the width of the spoke at those portions, thus forming "thickenings" as best understood from the claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show wheels having spokes that connect the hub to the rim, wherein the spokes transition from a solid cross-section area at the hub to a V-shaped cross-section area at the rim. For example, Kuribayashi ('027 S) shows a wheel of the type described above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger
Examiner
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